

ABSTRACT

A self-cleaning water filter, coupled to a water flow having particulates therein, that includes a pair of canisters, each having a cylindrical wedge wire water filter screen. An elongated brush running the length of the screen is disposed between two confining walls also running the length of the screen to form a chamber. A elongated partition, including two sets of apertures, is used, along with the elongated brush, to divide the chamber into two particulate dislodge chambers and a drain subchamber. A drain is in fluid communication with the drain subchamber. During cleaning, the drain is opened and the screen is rotated against the brush for liberating the particulate contaminants and a limited amount of the water flow into the two dislodge subchambers. The particulate contaminants and the limited amount of water then pass through the apertures at a high velocity and into the drain subchamber which exits through the drain. Alternatively, a reverse flow of clean water can be used in combination with the elongated brush, for dislodging the particulate contaminants from the water filter. Finally, another variation of using a reverse flow of water for cleaning purposes is discussed whereby a stationary water filter is disposed in a system that isolates the water filter from the normal water flow during cleaning.